



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/785,999	02/26/2004	Alexei Skarine	13210-20	6731
------------	------------	----------------	----------	------

1059 7590 08/27/2007

BERESKIN AND PARR
40 KING STREET WEST
BOX 401
TORONTO, ON M5H 3Y2
CANADA

EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

08/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

Response to applicant's amendment filed on June 14, 2007, which has been entered. The applicant's arguments, see pages 7-10 with respect to the amended claims 1-3, 6, 7, 10-15, 18, 19 and 22-26 have been fully considered but are moot in view of the new ground(s) of rejection presented in this Final office action.

Information Disclosure Statement

The information disclosure statement filed December 20, 2006, February 04, 2005 and March 31, 2006, which have been placed in the application file, the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 6, 7, 10, 11, 13-15, 18, 19, 22, 23, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by **Lennart** (EP 1292086 A1, IDS cited).

Art Unit: 2629

2. As to **claim 1**, figures 2A, 2B, 4A, 4B, 6B and 6C of **Lennart** teach a keyboard (5), said keyboard for use with a device (1) in which a display screen (11) for displaying output to a user is provided, said keyboard comprising:

a) a plurality of keys (5), wherein each key is transparent;

b) a housing (2) for supporting said keys (5-4, 60-4), wherein said housing (2) is adapted to attach to said device (1) such that said keys overlie at least a part of said display screen (10);

so that in use, when said housing (2) is attached to said device (1), at least one part of one or more images displayed on said at least a part of said display screen (10) is visible to said user through at least one of said plurality of keys (5-4, 60-4);

wherein said device (1) provides a touch-sensitive element (10), wherein, in use, said touch-sensitive element (10) is actuated to send one or more signals to a processor when said touch-sensitive element (10) is touched, and wherein said housing (2) is adapted to attach to said device (1) such that said keys (5-4, 60-4) overlie at least a part of said touch-sensitive element (10);

wherein each key (5) comprises at least first and second surfaces (4) and is moveable within said housing (2), in use, between a first position in which said key (5) does not touch said touch-sensitive element (10), and a second position in which said second surface of said key (5) is displaced to actuate said touch-sensitive element (10), such that when a key (5) of said plurality of keys (5-4, 60-4) is pressed at said first surface thereof by said user, said key (5) is moved from said first position to said second position to actuate said touch-sensitive element (10); and

Art Unit: 2629

wherein each of said plurality of keys (5-4, 60-4) is lens-shaped to magnify the at least one part of said images visible to said user therethrough, and wherein said first surface and second surface of each of said plurality of keys (5-4, 60-4) oppose each other and are convex in shape to define the lens shape of said key (5), see sections 26, 30, 31, and 44.

As to claims 2 and 3, Lennart teaches the keyboard of claim 1, wherein said device is a mobile device, and a handheld electronic device (a cell phone device 1, section 21).

As to claim 6, Lennart teaches the keyboard of claim 1, wherein said housing (2) is also adapted to attach to said device (1) such that at least another part of touch-sensitive element (10) remains accessible for providing user input and unobstructed by said keys (5-4, 60-4) (fig. 2B).

As to claim 7, Lennart teaches the keyboard of claim 1, wherein said housing (2) is also adapted to attach to said device (1) such that at least another part of said display screen (11) remains visible to said user and unobstructed by said keys (5-4, 60-4) (fig. 2B, section 26).

As to claim 10, Lennart teaches the keyboard of claim 1, wherein said housing (2) further comprises at least one actuator supporting each of said plurality of keys (5-4, 60-4), wherein each key is biased in said first position by said respective at least one actuator supporting said key (5), and wherein said respective at least one actuator is compressible to allow said key to move to said second position when said key is pressed (fig. 4A, section 30).

As to claim 11, Lennart teaches the keyboard of claim 1, for the keyboard is removable, in that the housing of the keyboard can be detached from the mobile device (fig. 2B, section 26).

3. As to **claim 13**, figures 2A, 2B, 4A, 4B, 6B and 6C of **Lennart** teach a device (a notebook computer 1) comprising a processor and a memory coupled to said processor, at least one processing module controlled by said processor, a display screen (11) coupled to said processor, and a keyboard (5) adapted for use with said device (1) comprising:

a) a plurality of keys (5-4, 60-4), wherein each key is transparent; and

b) a housing (2) for supporting said keys (5-4, 60-4), wherein said housing (2) is adapted to attach to said device (1) such that said keys overlie at least a part of said display screen (11);

wherein said at least one processing module is programmed to display one or more images on said first part of said display screen (11), such that for each key (5), at least one part of said images is visible to said user therethrough when said housing (2) is attached to said mobile device (1), and wherein said at least one processing module is programmed to determine the at least one part of said images visible through said key (5) when pressed;

wherein said device (1) further provides a touch-sensitive element (10), wherein, in use, said touch-sensitive element (10) is actuated to send one or more signals to a processor when said touch-sensitive element (10) is touched, and wherein said housing (2) is adapted to attach to said device (1) such that said

Art Unit: 2629

keys (5-4, 60-4) overlies at least a part of said touch-sensitive element (10);

wherein each key (5) comprises at least first and second surfaces (4) and is moveable within said housing (2), in use, between a first position in which said key (5) does not touch said touch-sensitive element (10), and a second position in which said second surface of said key (5) is displaced to actuate said touch-sensitive element (10), such that when a key (5) of said plurality of keys (5-4 and 60-4) is pressed at said first surface thereof by said user, said key (5) is moved from said first position to said second position to actuate said touch-sensitive element (10); and

wherein each of said plurality of keys (5-4, 60-4) is lens-shaped to magnify the at least one part of said images visible to said user therethrough, and wherein said first surface and second surface of each of said plurality of keys (5-4, 60-4) oppose each other and are convex in shape to define the lens shape of said key (5), see sections 26, 30, 31, and 44.

4. Claim 14 shares the same limitations as those of claim 2 and therefore the rationale for rejection will be the same.

5. Claim 15 shares the same limitations as those of claim 3 and therefore the rationale for rejection will be the same.

6. Claim 18 shares the same limitations as those of claim 6 and therefore the rationale for rejection will be the same.

7. Claim 19 shares the same limitations as those of claim 7 and therefore the rationale for rejection will be the same.

Art Unit: 2629

8. As to claim 22, Lennart teaches device of claim 13, wherein said at least one processing module is programmed to reconfigure said keyboard, by changing the one or more images displayed to said user on said first part of display screen (see figures 6A and 6B).

9. Claim 23 shares the same limitations as those of claim 11 and therefore the rationale for rejection will be the same.

10. Claim 25 shares the same limitations as those of claim 10 and therefore the rationale for rejection will be the same.

11. As to claim 26, Lennart teaches the device of claim 13, further comprising a backlight to illuminate said one or more image displayed on said display screen, see section 35.

12. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennart in view of Taylor et al (US 7,151,528).

Lennart teaches all of the claimed limitation of claims 1 and 13, except for the keyboard further comprising means for permitting a proximity sensor of said device to detect whether said housing is detached from said device.

However, Taylor teaches a related mobile phone keypad device which includes a proximity-sensitive touchpad behind keys.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lennart to dispose a proximity sensitive touchpad behind the mobile phone keypad as taught by Taylor, because this would improve the touchpad

Art Unit: 2629

operating through proximity sensing without requiring direct contact with the touchpad in order to activate (col. 2, lines 1-10 of Taylor).

Conclusion

13. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on December 20, 2006, February 04, 2005 and March 31, 2006 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone

Art Unit: 2629

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M. Nguyen/
KEVIN M. NGUYEN
Examiner
Art Unit 2629

KMN
August 23, 2007



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600